

## High Voltage Power Lines: Do They Affect Residential Property Value?

Charles J. Delaney\*  
Douglas Timmons\*\*

*Abstract* A survey administered in 1990 suggests that proximity to high voltage power lines is being capitalized into lower values for residential properties. Respondents who had appraised such property report that power lines can affect residential property value to varying degrees under certain circumstances and that the market value of these properties is, on average, 10.01% lower than the market value for comparable properties not subject to the influence of high voltage power lines. Further, the results indicate that even appraisers who had not appraised such property believe that power lines contribute negatively to property value.

### Introduction

The popular press and recent articles in the academic literature [5], [6] underscore a dramatic shift in perception regarding the value of residential property located proximate to high voltage electric power lines. It is commonly believed that power lines impose a significant negative impact on the desirability, hence the value of, housing stock adjacent to or within a short distance of the lines. This perception is in stark contrast to the preponderance of research dating from the mid-1950s to the late 1980s which found no or negligible impact on property values from power lines [17]. The most commonly cited reason for this shift is the potential health hazards detailed in epidemiological studies claiming a positive correlation between long-term exposure to the electromagnetic fields produced by power lines and certain types of cancers in humans [12], [13], [19]. While no study to date has proved conclusively that a health hazard exists, the ongoing debate poses an interesting question for researchers in the field of valuation. Specifically, is the perception that residential property is negatively affected by proximity to power lines based on reality, i.e., changes in the market for such properties, or is it simply a belief unsubstantiated by market evidence. If appraisers are penalizing properties located near power lines, but this penalty is not substantiated by market evidence, then there is, indeed, cause for concern.

To address the question of whether high voltage overhead electric transmission lines (HVOETLs) result in a lower market value for residential property located adjacent to or within sight of (proximate to)<sup>1</sup> the lines, a survey of appraisers holding the RM designation was conducted in 1990. This survey questioned appraisers who have

\*Hankamer School of Business, Baylor University, Waco, Texas 76798-8004.

\*\*College of Business Administration, The University of Texas at San Antonio, San Antonio, Texas 78285-0633.

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